

PATENT
Atty. Dkt. No. NVDA P000721**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method for generating vertices of a primitive extension, the primitive extension defining ~~the connectivity and vertices used to specify~~ a collection of connected primitives ~~within a generalized including an~~ originating primitive, comprising:

providing vertices of the [[an]] originating primitive;

retrieving parameters associated with the [[generalized]] primitive extension based on its primitive extension type, the parameters including a width (w), a step size (s) and an anchor width (a); and

generating vertices of the primitive extension [of the originating primitive] using the parameters by: (i) setting the vertices of the originating primitive as the first w vertices of the primitive extension, the vertices of the originating primitive including a number of anchor vertices of the primitive extension, the number of anchor vertices of the primitive extension being equal to the anchor width (a); and (ii) generating one or more additional vertices for each connected primitive other than the originating primitive, the number of vertices generated for said each connected primitive being equal to the step size (s).

Claim 2 (Cancelled)

Claim 3 (Currently Amended): A method as in claim 1, wherein a primitive extension type includes a triangle fan type, a quadrilateral strip type, and a cube strip type~~the generalized primitive is a fan-type primitive.~~

Claim 4 (Currently Amended): A method as in claim 3[[1]], wherein the w, s, a values for the triangle fan type primitive extension are 3, 1, 1, respectively, and the w, s, a values for the quadrilateral strip type primitive extension are 4, 2, 0,

respectively, and the w, s, a values for the cube strip type primitive extension are 8, 4, 0, respectively ~~the generalized primitive is a strip type primitive.~~

Claim 5 (Currently Amended): A method as in claim 1, wherein one of the parameters indicates a number of new vertices to be added to form a connected primitive adjacent to the originating primitive.

Claim 6 (Currently Amended): A method as in claim 1, wherein one of the parameters indicates a number of the vertices of the originating primitive to be used as anchor vertices for each adjacent connected primitive.

Claim 7 (Currently Amended): A method as in claim 1, wherein the parameters indicate a number of the vertices that are shared between two adjacent connected primitives.

Claims 8-15 (Cancelled)

Claim 16 (Currently Amended): A method for generating a data stream corresponding to a primitive extension, the primitive extension defining ~~the connectivity and vertices used to specify~~ a collection of connected primitives ~~within a generalized including an originating primitive~~, comprising:
obtaining vertex data for ~~the~~ an originating primitive; and
retrieving parameters associated with the generalized primitive extension based on its primitive extension type, the parameters including a width (w), a step size (s) and an anchor width (a), and generating an ordered data stream using said parameters;

wherein data elements in the ordered data stream include: (i) vertex data for the originating primitive that includes vertex data for a number of anchor vertex data of the primitive extension, the number of anchor vertex data of the primitive extension being equal to the anchor width (a); and (ii) vertex data for each connected primitive other than the originating primitive, the number of vertex data for said each connected primitive being equal to the step size (s) ~~are ordered based on the parameters associated with the generalized primitive.~~

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Claim 17-19 (Cancelled)

Claim 20 (Currently Amended): A method as in claim 16, wherein a primitive extension type includes a triangle fan type, a quadrilateral strip type, and a cube strip type~~the primitive extension is a strip or a fan.~~

Claim 21 (Cancelled)

Claim 22 (Previously Presented): A method as in claim 16, wherein the ordered data stream is generated by a primitive engine, and further comprising providing the ordered data stream to a vertex engine.

Claim 23 (Previously Presented): A method as in claim 16, further comprising providing the ordered data stream to a vertex engine.

Claim 24 (Currently Amended): A method as in claim 1, wherein the ~~[[generalized]]~~ primitive extension parameters are provided through an application program interface (API).

Claim 25 (Currently Amended): A method as claim in claim 1, wherein a sufficient number of connected primitives in the ~~[[generalized]]~~ primitive extension are generated to approximately cover a surface.

Claim 26 (Currently Amended): A method as claimed in claim 1, wherein the vertices of the primitive extension ~~[[is]]~~ are output as a data stream ~~comprising the data for each of the vertexes of the primitive extension.~~

Claim 27-32 (Cancelled)

Claim 33 (New): A method as in claim 20, wherein the w, s, a values for the triangle fan type primitive extension are 3, 1, 1, respectively, and the w, s, a values for the quadrilateral strip type primitive extension are 4, 2, 0, respectively, and the w, s, a values for the cube strip type primitive extension are 8, 4, 0, respectively.

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Claim 34 (New): A method for generating vertices of a primitive extension, the primitive extension defining a collection of connected primitives including an originating primitive, comprising:

providing vertices of the originating primitive;

retrieving parameters associated with the primitive extension based on its primitive extension type, the parameters including a width (w), a step size (s) and an anchor width (a); and

generating vertices of the primitive extension using the parameters.

Claim 35 (New): A method as in claim 34, wherein a primitive extension type includes a triangle fan type, a quadrilateral strip type, and a cube strip type.

Claim 36 (New): A method as in claim 35, wherein the w, s, a values for the triangle fan type primitive extension are 3, 1, 1, respectively, and the w, s, a values for the quadrilateral strip type primitive extension are 4, 2, 0, respectively, and the w, s, a values for the cube strip type primitive extension are 8, 4, 0, respectively.

Claim 37 (New): A method as in claim 34, wherein one of the parameters indicates a number of new vertices to be added to form a connected primitive adjacent to the originating primitive.

Claim 38 (New): A method as in claim 34, wherein one of the parameters indicates a number of the vertices of the originating primitive to be used as anchor vertices for each adjacent connected primitive.

Claim 39 (New): A method as in claim 34, wherein the parameters indicate a number of the vertices that are shared between two adjacent connected primitives.